

MEMORANDUM

To: Environmental Health Managers
District Health Directors
Authorized Onsite Soil Evaluators
VPI Contract Soil Scientists

From: Robert B. Stroube, M.D., M.P.H.
State Health Commissioner

Date: July 16, 2004

Subject: Implementation Manual for Authorized Onsite Soil Evaluator Regulations

GMP #126

Part I Background, Scope, General Requirements

- A. Background.** The 1994 General Assembly passed legislation requiring the Board of Health to create a program for Authorized Onsite Soil Evaluators (SB 415, Virginia Acts of Assembly, 1994, Chapter 747). That legislation required the Board to implement a program for training, testing, approving, and disapproving Authorized Onsite Soil Evaluators (AOSEs). Initially the law provided that any person who was a certified professional soil scientist (CPSS) and demonstrated knowledge, skills, and abilities in the field of evaluating soils for onsite sewage treatment and disposal systems would be deemed to be an AOSE. Furthermore, the legislation required the Virginia Department of Health (VDH) to contract with an AOSE for soil evaluations if the processing time (“backlog”) for applications for construction permits exceeds 15 working days.

The 1999 General Assembly passed legislation that introduced major changes to the AOSE program (HB 2337, SB 963, 1999 Acts of Assembly, Chapters 0871, 1038). Of particular importance was the new mandate that VDH accept private evaluations and designs for residential development from AOSEs and from professional engineers (PE) in consultation with an AOSE. The new legislation placed strict time limits on VDH for processing applications for certification letters and construction permits as well as time limits for reviewing proposed subdivisions for local governments. The 1999 legislation also included a provision (deemed approval) for automatically approving AOSE/PE evaluations and designs if VDH fails to act on a request within the time limits. It also

extended from July 1, 1996, to July 1, 2001, the date that a CPSS could be deemed to be qualified as an AOSE.

VDH implemented the 1999 legislation via interim policies (GMPs 99, 100, and 103) beginning July 1, 1999, and the Board promulgated the *Emergency AOSE Regulations* (12 VAC 5-615-10 et seq.) which were effective for one year beginning January 3, 2000. When the *Emergency AOSE Regulations* expired, VDH offered to continue to accept certified evaluations and designs from those AOSEs holding current certifications if they agreed to be bound by the requirements of the *Emergency AOSE Regulations* and VDH's policies. Those AOSEs desiring to do so executed written agreements with VDH.

The Board promulgated permanent *Authorized Onsite Soil Evaluator Regulations* (12 VAC 5-615-10 et seq., the "*AOSE Regulations*") with an effective date of July 1, 2002. This policy provides guidance to VDH staff, AOSE/PEs, and others for administering, interpreting, and enforcing the *AOSE Regulations*.

Effective immediately, VDH Guidance Memoranda and Policies (GMP) #54 (Defining Backlogs), #99, #100, and #103 are hereby rescinded; all agreements executed between VDH and individual AOSEs upon the expiration of the *Emergency AOSE Regulations* are null and void upon the effective date of the *AOSE Regulations*.

- B. Scope and Applicability.** This policy applies to all site and soil evaluation reports and/or designs submitted to VDH after June 30, 2002. These include both residential and non-residential reports and designs generated by AOSE/PEs and other individuals.¹

Only applications (includes requests for subdivision review) for *residential development* submitted in proper form with evaluations and designs certified by an AOSE/PE shall be subject to processing time limits and deemed approval. VDH shall accept and approve such applications in accordance with the *AOSE Regulations* and VDH policies and may do so without the requirement for either Level 1 or Level 2 reviews. Section 163.5.D of the *Code* provides that "proprietary pre-engineered systems" deemed by VDH to comply with the Board of Health's regulations shall not be subject to deemed approval. VDH may, at its sole discretion, accept and approve applications for *non-residential development* and applications for proprietary pre-engineered systems submitted in proper form with evaluations and designs certified by an AOSE/PE without the requirement for either Level 1 or Level 2 Reviews.²

Local ordinances (including Chesapeake Bay Act requirements) establishing requirements for onsite wastewater systems that are more stringent than the Board of Health's regulations are not affected by the *AOSE Regulations* unless a locality

¹ After December 31, 2005, VDH will only accept reports and/or designs from an AOSE/PE.

² See Part III, Subsections C and D of this policy for explanations of Level 1 and Level 2 Reviews.

indicates in writing that it desires the local or district health department to apply the provisions of the *AOSE Regulations* to those local ordinances. When such a request is made, the appropriate local or district health department will be responsible for requiring all AOSE/PE reports submitted in the locality to be certified as complying with both the Board of Health's regulations and the appropriate local requirements. Local and district health departments are responsible for ensuring that local government officials are adequately informed regarding the AOSE program and for determining that a person requesting implementation of more-stringent local ordinances has authority to act for the local government.

- C. General Requirements.** All requests for VDH approvals or reviews (construction permits, letters, subdivision approvals, courtesy reviews) must be made in writing and must contain a statement signed by the owner of record giving VDH permission to enter the property during the processing of the request and until such time that an operation permit has been issued for a sewage system. Generally, requests for construction permits and letters begin with the filing of an application; requests for review of proposed subdivisions are initiated by a local government, and requests for courtesy reviews are initiated by an AOSE/PE.

All evaluation reports and designs submitted to VDH, whether by an AOSE/PE or by any other person, must be in the form specified in this policy and contain the minimum information required, and shall be certified as substantially complying with the minimum requirements of the *Sewage Handling and Disposal Regulations* (12 VAC 5-610-20 et seq., the "*Regulations*"). (See *AOSE Regulations*, section 70). **Whenever an AOSE is required to sign or certify work according to the *AOSE Regulations* and/or this policy he must, in addition to his signature, apply a stamp or a preprinted or electronic seal bearing the AOSE's name and certification number to original cover sheets of plans, drawings, plats, reports, and specifications and to each original sheet of plans, drawings, plats, reports, and specifications prepared by the AOSE or someone under his direct control and supervision. Application of the seal and signature indicates acceptance of responsibility for work shown thereon.**

Whenever VDH denies a request for site approval (construction permit, letter, subdivision approval) for a reason that is correctable by the applicant, the owner may submit additional information as necessary within 90 days from the date the request was rejected. Examples of such administrative denials include cases where applications are incomplete, inaccurate information is provided, applications are not in proper form, engineering plans are needed, or a lot needs to be cleared. The time limits for processing the application, when applicable, will begin anew on the day the additional information is received.

- D. Sunset Date.** After December 31, 2005, ("sunset date") local and district health departments will accept private evaluations and designs only from an AOSE/PE.

Local and district health departments must return to the applicant any non-AOSE/PE materials that are submitted after the sunset date. If, after the sunset date, the request for approval (application for permit or letter or request for subdivision review) requires a private evaluation, it will be rejected as incomplete (administrative denial) if it is not accompanied by appropriate supporting documentation from an AOSE/PE. If a private evaluation is not required, the application will be handled as a bare application. Throughout this policy, private evaluations and designs will be referred to generally as ‘AOSE/PE evaluations and designs’ with the understanding that VDH will continue to accept evaluations and designs from non-AOSE/PE consultants until the sunset date. Such non-AOSE/PE evaluations and designs must comply with the requirements of the *AOSE Regulations* and this policy, they are not subject to deemed approval and they must be fully reviewed by VDH in the field.

Part II Applications

A. Applications for AOSE Certification

1. In accordance with § 210 of the *AOSE Regulations*, any person holding a valid certification as an AOSE on July 1, 2002, may apply for renewal of that certification as appropriate and will not be required to take the written and field tests. All other applicants (includes new applicants, any person who has allowed his AOSE certification to expire, or any person required to reapply for AOSE status as a result of disciplinary action) must take and pass the written and field tests. Exception: Any current or former VDH employee seeking certification as an AOSE shall not be required to take and pass the written and field tests provided he successfully completed VDH training in the onsite sewage and water programs on or after July 1, 1999.
2. The written and field tests will only be administered after an applicant has filed a complete application that has been reviewed and approved by the Division of Onsite Sewage and Water Services (the “Division”). All applicants should contact the Division to schedule testing. The Division will schedule a field test only after an applicant has successfully completed the written test.
3. All applications for certification as an AOSE must be submitted to the Division. The Division is responsible for reviewing applications and determining whether those applications are complete and whether the applicant meets the minimum requirements for certification as an AOSE. The Department is responsible for maintaining a current list of certified AOSes and making that list available to local VDH offices.
4. A complete application for certification as an AOSE includes all of the following:

- a. The completed application form (AOSE Form A).
- b. The application fee specified in § 250 of the *AOSE Regulations*.
- c. Professional references from three individuals, each of whom is an AOSE, a PE, or a Virginia CPSS.

References shall be made on AOSE Form B. References must attest to the knowledge, skills, and abilities of the applicant to perform the work necessary to site and design a system in accordance with the *Regulations* and, when required, confirm the experience of the applicant. All references must be from citizens of the Commonwealth who are not related to or employed by the applicant. VDH employees may provide references at their discretion. References may be submitted in either of two ways. The person making the reference may mail it directly to the Division using the address on the reference form, or the person making the reference may return it to the applicant in a sealed envelope to be included with his application. In the latter case, the applicant must enclose the reference with his application in the original, unopened envelope.

- d. Documentation to establish that the applicant meets one of the four criteria for certification established in § 230 (i.e. CPSS or appropriate combination of experience and education). Applicants must submit an official transcript to demonstrate the college degree requirements of subsections 2 or 3 of § 230. Applicants must submit documentation to demonstrate the experience requirements of subsections 2, 3, or 4 of § 230. A year of full-time experience is defined as a minimum of 1,760 hours or 220 workdays during a 12-month period. More than 1,760 hours or 220 workdays during a 12-month period will not be considered as more than one year of full-time employment. The Division may require an applicant to obtain additional experience if it determines that the applicant's experience is not related to the current Virginia onsite wastewater regulations and policies or if an excessive period of time has lapsed between the dates of documented full-time experience and the date of application for certification as an AOSE.
- e. When required (see subsections 3 and 4 of § 230), a written statement signed by a current or former supervisor or an AOSE with current certification.
- f. When required (see subsections 2, 3, and 4 of § 230), documentation that the applicant has successfully completed VDH's training courses or a training course or courses designated and approved by the Division. VDH training courses currently consist of several training modules pertaining to the *Regulations* and the *Private Well Regulations*. The Division may

require an applicant to complete additional approved training courses if it determines that the courses completed by the applicant were not based upon current Virginia onsite wastewater regulations and policies or if an excessive period of time has lapsed between the completion of the approved training courses and the date of application for certification as an AOSE.

5. A complete application for renewal of a certification as an AOSE includes all of the following:
 - a. The completed application form (AOSE Form C).
 - b. The application fee specified in § 250 of the *AOSE Regulations*.
 - c. Documentation that the applicant has earned two continuing education units during the previous two years.
 - d. Documentation, when appropriate, that the applicant is currently certified by the Department of Professional and Occupational Regulation as a Virginia CPSS.

B. Applications for Permits and Letters; Request for Subdivision Review

1. Incomplete submittals delay the timely and accurate decision making process. Therefore, all applicants are vigorously encouraged to assure that all submittals are complete at the time of submission. Section 350 of the *AOSE Regulations* contains the requirements for applications filed with AOSE/PE evaluations and/or designs. An AOSE/PE may submit additional information beyond the minimum requirements when he believes it may be in the interest of public health, the environment, or the client to do so. Applications submitted to VDH are either bare applications (without evaluation or designs from an AOSE/PE) or applications with complete supporting documentation from an AOSE/PE.
2. Each page of a submittal package must be numbered using the format “Page ____ of ____” in the top right hand corner of each page. This will assure the health department has in its possession, at the time of the review, a complete package of the information submitted.
3. Section 360 of the *AOSE Regulations* requires that sites certified by an AOSE/PE “must be defined in a manner that allows them to be identified with an accuracy and precision of three feet or less.” This section addresses both the documentation submitted to VDH and the ability to locate the site in the field at a later date. The AOSE/PE or surveyor must provide sufficient information to allow a person with the knowledge, skills, and abilities of an EHS, AOSE, or an onsite wastewater system installer to locate a site in the field. Such information may include, but is not limited to, permanent field markers or distances and

bearings to identifiable landmarks. Current VDH policy (GMP #52) applies to bare applications and requires an applicant for a certification letter to “provide a survey plat that identifies the approved onsite sewage disposal system area.” The policy provides that the district or local health department may waive the survey requirement on a case by case basis; however, in those cases the district or local health department assumes responsibility for ensuring that the absorption area is accurately located. Except as noted below, each site certified by an AOSE/PE must be located by surveying the perimeter of the soil absorption area and showing that area on a survey plat. This plat is to be incorporated as part of the site and soil evaluation report. An AOSE/PE may opt to show the location of a site for a construction permit (not a certification letter or proposed subdivision) by drawing the perimeter of the absorption area to scale on a survey plat or a copy of a survey plat. VDH does not prescribe for the professional the methods or equipment that he must use to accomplish these requirements, however, it strongly recommends that all sites, including those for construction permits, be surveyed by a licensed surveyor and platted accordingly.

4. The minimum requirements for all applications filed with AOSE/PE evaluations and/or designs are as follows:
 - a. All applications (residential and non-residential) for single-lot construction permits shall contain the following:
 - i. The completed application form (AOSE Form D);
 - ii. The appropriate fees;
 - iii. A site and soil evaluation report in accordance with § 360 of the *AOSE Regulations* and Part II, Section C of this policy;
 - iv. A proposed well site location and well construction criteria (when a private well is proposed);
 - v. Construction drawings and specifications for the system proposed in accordance with § 380 of the *AOSE Regulations* and Part II, Section D of this policy; and
 - vi. A statement certifying that the site and soil conditions and design substantially comply with the *Regulations* (and the *Private Well Regulations* when a private well is proposed). AOSE Form G contains the appropriate certification statements for use by AOSE/PEs.
 - b. All applications (residential and non-residential) for single-lot certification letters must include the following:
 - i. The completed application form (AOSE Form D);

- ii. The appropriate fees;
 - iii. A site and soil evaluation report in accordance with § 360 of the *AOSE Regulations* and Part II, Section C of this policy;
 - iv. A proposed well site location and well construction criteria (when a private well is proposed);
 - v. An abbreviated system design in the form as specified in AOSE Form E, or as appropriate for the type of system proposed; and
 - vi. A statement certifying that the site and soil conditions and design substantially comply with the *Regulations* (and the *Private Well Regulations* when a private well is proposed). AOSE Form G contains the appropriate certification statements for use by AOSE/PEs.
- c. *Multiple certification letters* (see § 120, Definitions) shall be the method for reviewing proposed subdivisions in localities without a subdivision ordinance. In accordance with § 350.D of the *AOSE Regulations*, in addition to the information specified in paragraph b above (includes an application form and fees for each proposed lot), a preliminary subdivision plat that provides the information specified in § 360 of the *Regulations* is required. Paragraph d.iv below describes the minimum requirements for such plats.
- d. Local and District health departments shall review proposed subdivisions only upon request by an authorized agent of local government. An owner or applicant may not initiate a request for subdivision review independent of the local subdivision process. The subdivision process is a local function that is governed by local ordinances. Section 15.2-2242 of the *Code* provides that localities may adopt ordinances requiring the applicable health official to render a preliminary opinion regarding the suitability of the subdivision for the installation of subsurface sewage disposal systems. Section 15.2-2260 provides that a local subdivision agent must forward preliminary plats to appropriate state agencies if approval of a feature or features of the plat by a state agency is necessary. That section further provides that any state agency making a review of a plat forwarded to it must complete its review within 45 days and if the agency does not approve the plat it must state the specific reasons for disapproval in writing. Section 360 of the *Regulations* provides guidance when review of subdivision plats is required by local ordinances. In accordance with § 350.E of the *AOSE Regulations*, all requests for subdivision review must include the following:
- i. A letter from the authorized agent of the local government requesting review of the proposed subdivision and a statement certifying that the

subdivision package has been determined to be complete (See AOSE Form F);

- ii. Site and soil evaluation reports for each proposed lot, identified as to the subdivision/section and proposed lot number, in accordance with § 360 of the *AOSE Regulations* and Part II, Section C of this policy;
- iii. Proposed well site locations and well construction criteria (when private wells are proposed);
- iv. A preliminary subdivision plat that provides the information specified in § 360 of the *Regulations*. This plat must include all the information required by local ordinances and the following if not required by local ordinance: locations of proposed onsite sewage systems and reserve areas (if applicable), all proposed and existing streets, utilities, storm drainage, water supplies, easements, and lot lines for each proposed lot, and original topographic contour lines by detail survey. The plat should be prepared according to suggested scales contained in Appendix L of the *Regulations*. The immediate area in and around each proposed system, including the soil absorption system, must be shown using a contour interval not greater than two feet; the contour area shown outside the soil absorption system should be sufficient to establish the relationship of the area to relevant topographic features such as, but not limited to, drainage ways, sink holes, road cuts, and steep slopes. A minimum distance of 20' is recommended;
- v. Abbreviated system designs in the form specified in AOSE Form E, or in a form appropriate for the type of system proposed;
- vi. A statement certifying that the site and soil conditions and designs substantially comply with the *Regulations* (and the *Private Well Regulations* when private wells are proposed). AOSE Form G contains the appropriate certification statements for use by AOSE/PEs; and
- vii. A signed statement from the owner of record giving VDH permission to enter the property for the purposes of reviewing the site and soil conditions both prior to the review and approval and afterward (if necessary) for quality control purposes and to protect public health and the environment. The permission statement from the standard application form (AOSE Form D) is sufficient.

C. Documentation Required for Soil Evaluation Reports

1. Section 360 of the *AOSE Regulations* provides that all site evaluation reports must be in a form approved by the Division and must contain the

minimum information specified by the Division. AOSE Form G contains the site evaluation report form for use by *all evaluators*. All soil evaluation reports must be signed and dated. In addition, all reports must be properly marked as substantially complying (approved) or not complying (rejected) with the *Regulations*.

2. All site and soil evaluations must be conducted in accordance with Part III of the *Regulations* (§§ 450-500) and reports must contain the minimum information specified by the *Regulations*. Each soil profile hole augered or dug during a soil investigation must be described completely and accurately and located on a site sketch. All holes used to establish the suitability of a site must show that the site substantially complies with the requirements of the *Regulations*. The following shall apply to all soil descriptions:
 - a. The maximum acceptable separation distance between observation holes is 100 feet. The use of common holes between adjacent proposed sewage disposal system sites to describe both sites is not acceptable.
 - b. Number of profile holes. The *Regulations* (§ 480.C.1.4) require a minimum of five soil profile descriptions for each separate area being established as suitable for a soil absorption system (i.e. primary and/or reserve area). If a site exhibits sufficient uniformity of topography and profile, the number may be reduced to three. Profile holes must be placed so as to be representative of the soil absorption area.
 - c. Depth. Profile holes must meet the requirements of the *Regulations* (see § 480.C.1.3) and be at least 18 inches deeper than the proposed trench bottom depth.
 - d. The following soil characteristics must be documented (See § 490 of the *Regulations*):
 - i. Soil horizons. The depth of each major horizon of all soil profiles must be documented using U. S. Department of Agriculture soil textural classes (including the percent and size of coarse fragments) and soil colors. Soil colors (matrix and mottle patterns) are to be determined and reported using the *Munsell Soil Color Charts* (Munsell Color, Macbeth Division of Kollmorgen Instruments Corp., 2441 North Clavert Street, Baltimore, Md. 21219). All colors must be reported using the Munsell notations for hue, value and chroma (i.e. 5YR 5/6). Color names may be added. Abbreviations of terms (i.e. soil color, texture, etc.) are not acceptable.

- ii. All holes or pits in the area of the proposed soil absorption system must be described as to depth to redoxymorphic features (seasonal water table or seasonal saturation).
 - iii. Depth to rock or restrictive layers (when applicable).
 - iv. Soil permeability. The estimated percolation rate must be reported. When permeability tests are conducted (including percolation tests, hydraulic conductivity tests, and other measures of soil permeability), a copy of all test results must be included. Permeability tests conducted by an AOSE/PE do not require VDH supervision. Tests conducted by a non-AOSE/PE (accepted only through December 31, 2005) shall be supervised by VDH in accordance with the *Regulations*.
 - v. Shrink-Swell potential (if moderate or greater).
 - vi. When backhoe pits or other excavations are used, the complete range of soil characteristics exposed is to be described (depth to mottles, rock percentage and depth to rock or other restrictive layers & variability in rock depth). OSHA Regulations apply when working in pits.
- e. Additional information. The following soil characteristics are to be documented when the evaluator determines they will provide additional information regarding soil suitability:
- i. Soil consistence
 - ii. Soil structure (type, class and grade)
 - iii. Soil mottling patterns (abundance, contrast and size)
 - iv. Soil parent material and geologic province
 - v. Clay mineralogy and the existence of various soil minerals (feldspar, mica, quartz, etc.)
 - vi. Root penetration.
3. A site sketch shall be provided with each site and soil evaluation report that documents the location of all soil profiles and relevant site features. Sketches must represent the topography in the vicinity of the proposed onsite sewage system as well as the topography in the vicinity of any private water supply (existing or proposed) so as to establish the topographic relationship between such water supplies and sources of

contamination including, but not limited to, the proposed soil absorption system. Sketches must be neat, legible, and drawn to scale when possible. The AOSE/PE may use the survey plat required in Part II, Section B.3 of this policy as the site sketch when appropriate. When scale drawings are not practical, the sketch shall provide accurate documentation (distances) for profile holes and other features and suitable reference points. If not using the survey plat, sketches should be drawn on 8.5" x 11" paper. Sketches must show the minimum information specified in § 460 of the *Regulations*, including, but not limited to, the following features as specified below:

- a. Existing and proposed property lines for the subject property and any other property lines within 10 feet of the perimeter of the proposed soil absorption area and/or proposed structure;
- b. Within 200 feet of the center of the proposed soil absorption area and structure:
 - i) Existing and proposed wells, springs, and cisterns. If a private water supply is proposed, the location and construction of the proposed water supply (or supplies) must comply with the *Private Well Regulations*;
 - ii) Existing and proposed onsite sewage systems;
 - iii) Shellfish waters, lakes, streams, other bodies of water, and surface impoundments used for drinking water; and
 - iv) Sinkholes, drainage ways, flood plains, drainage ditches, and tile drainage.
- c. Percent slope and direction (an acceptable topographic map may be substituted);
- d. Existing and proposed structures, buildings, etc. within 40 feet of the perimeter of the proposed soil absorption area;
- e. Easements, rights of way, driveways, roads, and buried and above-ground utilities within 20 feet of the perimeter of the proposed soil absorption area;
- f. Compliance with Chesapeake Bay Local Assistance Department requirements and local regulations should be documented when applicable; and

- g. Any other information which may have bearing on the issuance of any approval by the Department.
- 4. Other information pertaining to local ordinances (i.e. Chesapeake Bay requirements, etc.) should be included. However, for the purposes of an AOSE/PE certifying that an evaluation and/or design complies with the *Regulations* and for “deemed approval” only those requirements contained in the *Regulations* will apply unless a local government has requested its health department to implement a local ordinance through this policy (See Part I of this policy, **Scope and Applicability**).

D. System Designs

- 1. Section 380 of the *AOSE Regulations* provides that any application for a construction permit accompanied by an AOSE/PE certification shall contain construction drawings, plans, and specifications in a form approved by the Division. The AOSE/PE must provide sufficient detail to allow an installer to accurately construct the system in accordance with the *Regulations*. AOSE Form H is the form for informal construction drawings, AOSE Form J is for specifications, and AOSE Form I is the form for submitting design calculations. Three copies of the construction drawing and specifications shall be submitted at the time of application. The following minimum information is required (unless formal engineering plans pursuant to § 250.G of the *Regulations* are required):
 - a. All the information required on form CHS 202 A and B (Construction Permit) or replacement as determined by the Division.
 - b. Construction drawings. All construction drawings shall be drawn to scale. As a minimum, drawings must show property lines, all existing and proposed structures, existing and proposed sewage systems and water supplies, slope, any topographic features which may impact the design of the system, and existing and proposed easements and utilities within a distance from the center of the proposed soil absorption system and reserve area (when applicable) equal to twice the horizontal setback required by the *Regulations* for that particular feature (i.e. 140’ for shellfish growing waters). The scale drawing of the proposed sewage system shall show sewer lines, septic tank, treatment units (if applicable), pump station (if applicable), conveyance system, and subsurface soil absorption system, reserve area, and other relevant features which may affect the proper operation and functioning of the system or be affected by the system. When a private drinking water supply is to be located on the same lot, show all sources of pollution within 200 feet of the proposed water supply.

- c. Plans and specifications. Plans and specifications sufficient to allow the successful installation of a system shall be included. See AOSE Form J.
 - d. Design calculations. Design calculations used to establish the design parameters of the recommended system shall be submitted (See AOSE Form I). Design calculations must include:
 - i. Calculations indicating that the minimum separation distance to seasonal ground water, rock, or other limiting factor is provided;
 - ii. Minimum depth of trenches and separation of trenches when slopes are greater than 10%;
 - iii. Design flow calculations used for septic tank and drainfield sizing based on bedrooms or per person;
 - iv. When a pump is used, the calculations will show the static head, friction head and total dynamic head at the operating condition of the pump. The pump curve shall also be provided;
 - v. Pump tank volumes and emergency storage requirements;
 - vi. Trench bottom area and number of trenches;
 - vii. Calculations for low pressure distribution, drip irrigation, etc.;
 - viii. Calculations for Wisconsin mound, other fill systems, etc.
2. The information listed above is the *minimum* information necessary to issue a construction permit. Additional information may be necessary depending on the specific site. Applications that do not contain this minimum data set shall be returned as incomplete or denied. When additional information is needed to assure that the proposed system may be properly installed, it is the AOSE/PE's responsibility to provide such information. The information submitted must be sufficient to assure that the system may be installed in accordance with the *Regulations* and the permit. When a system is sufficiently complex to require engineering plans, a professional engineer shall seal the plans and specifications.

Part III VDH Review

A. Applications for Certification as an AOSE

1. The Division will review applications for certification as an AOSE. This review will include, but is not limited to:
 - a. A determination that the application is complete;
 - b. Verification (if applicable) with the Department of Professional and Occupational Regulation that the applicant is a CPSS in Virginia;
 - c. Review of transcripts (if applicable) to determine compliance with subsections 2 or 3 of § 230;
 - d. Review of the references and other documentation to assure that the applicant has the requisite years of experience specified in subsections 2, 3, or 4 of § 230;
 - e. Review of the statement required in subsection 3 or 4 of § 230 (if applicable); and
 - f. Review of training records provided by the applicant (if required) for compliance with subsections 2, 3, or 4 of § 230.
2. When the Division finds that an application is complete it shall notify the applicant in writing that he may schedule the written and field tests.
3. When the Division finds that an application is incomplete or that the applicant has not complied with the minimum requirements of § 230 of the *AOSE Regulations*, the Division shall notify the applicant in writing. The written notice must state the reasons for denial and that the applicant may request a hearing in accordance with § 180 of the *AOSE Regulations*.
4. When an applicant has passed the written and field tests, the Division shall issue a certificate to the AOSE. When such an applicant is unsuccessful, the Division shall notify the applicant in writing and state the reasons for denial.
5. The Division shall send all written communications regarding applications for certification as an AOSE by certified mail or they shall be hand delivered.

B. Applications for Renewal of AOSE Certification

1. The Division will review applications for renewal of AOSE certification. This review will include, but is not limited to:
 - a. A determination that the application is complete;
 - b. Verification (if applicable) with the Department of Professional and Occupational Regulation that the applicant is a CPSS in Virginia;
 - c. Verification of the applicant's continuing education units.
2. When the Division finds that the application is complete and the applicant has complied with the requirements of § 270 of the *AOSE Regulations*, it shall renew the applicant's AOSE certification.
3. When the Division finds that an application is incomplete or that the applicant has not complied with the minimum requirements of § 270 of the *AOSE Regulations*, the Division shall notify the applicant in writing. The written notice must state the reasons for denial and that the applicant may request a hearing in accordance with § 180 of the *AOSE Regulations*.
4. The Division shall send all written communications regarding applications for renewal of AOSE certifications by certified mail or they shall be hand delivered.

C. Applications and Requests for Permits, Letters, and Subdivision Review

1. The Department's program for reviewing applications for permits and letters and requests for subdivision review will employ two basic levels of review: the in-office Level 1 review and the field check or Level 2 Review. With the exception of proprietary pre-engineered systems, applications and requests that are for residential development are subject to the processing time limits and deemed approval as described in § 80 of the *AOSE Regulations*.
2. Applications that are found to be incomplete or deficient in a manner that can be corrected by the applicant will be returned to the applicant as incomplete or "unable to process." Examples of such administrative denials include, but are not limited to, the need to clear an area, the need for AOSE or PE plans, or the need to mark property lines or house site. In such cases, an applicant has 90 days to perfect the deficiency contained in the application. In general an owner cannot appeal the rejection of an incomplete application. It is VDH's policy not to allow the owner to file a new (revised) application and pursue an administrative appeal simultaneously. In such a case the owner must decide which potential remedy (new application or appeal) he desires to pursue. Applications that

clearly fail to comply with the requirements of the *Regulations* are to be denied in the usual fashion.

D. Procedures for Applications for Construction Permits and Certification Letters

1. All applications and fees are to be received and logged-in manually or electronically as established by the Department. Local and district health departments are responsible for entering data according to VDH's data tracking policies. If resources allow, all applications should be reviewed for completeness at the time they are received and should be returned to the applicant if incomplete for any reason. An incomplete application should not be logged in, nor should fees be accepted for an application that is known to be incomplete at the time it is filed. Whenever possible, administrative support staff should be responsible for these tasks.
2. The Level 1 Review is intended to determine if an application is complete and to confirm that the site and/or the design certified by the AOSE/PE substantially comply with the *Regulations*, the *AOSE Regulations*, and this policy. A Level 1 Review consists of administrative and technical reviews and *does not include field review*. Local and district health departments should complete a Level 1 Review of each application accompanied by AOSE/PE documentation. The local or district health department may waive the Level 1 Review (see § 70.B) on a case by case basis if it determines that such review is not necessary based on the (acceptable) past performance of an individual AOSE/PE.
3. Generally, an Environmental Health Specialist Senior (EHS) is responsible for the Level 1 Review. The EHS may review VDH records to verify that the site has not been previously denied (note: this refers to the site not the lot) and to verify that the proposed sewage system and/or well do not conflict with the minimum set back distances for existing and proposed features on adjacent properties. This review of VDH records constitutes a quality assurance *review* and is not intended to be a substitute for the AOSE/PE's sanitary survey (i.e. field evaluation) and thorough records review which are required to establish setbacks with certainty. The ultimate responsibility for establishing setback distances remains with the AOSE/PE certifying the work.
4. If a Level 2 Review will not be performed and the application is found to meet the minimum requirements of the *Regulations*, the *AOSE Regulations* and this policy, a construction permit or certification letter is issued after the Level 1 review. Applications that are incomplete or that do not comply with the minimum requirements of the *Regulations*, the *AOSE Regulations* and this policy are to be returned to the applicant as "unable to process" (administrative denial) or rejected (denied) as appropriate. The

administrative denial or rejection must be linked to the appropriate AOSE using the Department's data system (VENIS or successor system). Level 1 review is generally considered the minimum level of review necessary to ensure that public health and the environment are protected.

5. The Level 2 Review (field check) is a detailed onsite evaluation of the site conditions and/or the design certified by an AOSE/PE to establish conformance with the *Regulations*, the *AOSE Regulations*, and this policy.
 - a. The purposes of the Level 2 Review are to ensure that public health and the environment are protected and to assess the performance of private sector evaluators and designers by sampling a subset of the work submitted by AOSE/PE consultants.
 - b. Local and district health departments should complete Level 2 Reviews of a minimum of 10% of the sites and/or designs certified by each AOSE/PE. Local and district health departments may conduct additional Level 2 Reviews as necessary or as resources allow.
 - c. Level 2 Reviews may be conducted at any time, however, local and district health departments are *strongly encouraged* to complete them prior to approving or denying an application during the time limits specified by the *Code*. There may be occasions when local and district health departments will need to conduct Level 2 Reviews after an approval has been issued. These include, but are not limited to, complaints from owners, AOSE/PEs, and the public regarding an approved site or situations where VDH has reason to believe that an AOSE/PE has certified one or more sites that do not substantially comply with the *Regulations*. In such cases it may be necessary to conduct additional Level 2 Reviews of approved sites to determine whether public health and the environment are being threatened by the actions of a private AOSE/PE.
 - d. A Level 2 Review may include conducting soils borings, examining backhoe pits or other excavations, a sanitary survey, permeability testing, or other actions necessary to assure that a site and/or design complies with the *Regulations*, the *AOSE Regulations* and this policy.
 - e. The local or district health department will perform Level 2 Review using the best methods available at the time, including evaluating open backhoe pits or other excavations and using a hand auger. An owner will not be required to hire a backhoe for a Level 2 Review if one is not available at the time of the review.
 - f. To the extent that it is practical, the local or district health department should notify the owner when it intends to conduct a Level 2 Review.

Such notice may be by telephone or other electronic means (properly documented in the file) or it may be in writing. AOSE Form K is to be used to document a Level 2 Review. The local or district health department must send a copy of the completed report to the owner and the appropriate AOSE/PE.

6. If a Level 2 review reveals that a site and/or design does not substantially comply with the *Regulations*, the *AOSE Regulations* and this policy, the application will be denied. The denial letter must be linked to the appropriate AOSE using the Department's data system (VENIS or successor system). If such a site and/or design is the subject of an approval already issued by VDH, the local or district health department may initiate procedures to revoke or modify the approval (see Part IV of this policy). In such cases the local or district health department should also contact the Division to determine whether enforcement action with the AOSE is appropriate.
7. Through December 31, 2005, VDH will continue to accept evaluations and proposed designs from non-AOSE/PE consultants. All applications received with evaluations and/or designs from non-AOSE/PE consultants must be handled according to the following:
 - a. For backlog accounting purposes these applications are considered bare applications;
 - b. Reports may be submitted for residential or non-residential development;
 - c. They must meet all of the same requirements as AOSE/PE reports, including but not limited to all format requirements, content, and required certification statements;
 - d. Local and district health departments must complete Level 1 and Level 2 Reviews of all submittals. Approvals will only be issued for those applications that substantially comply with the *Regulations* based on VDH's findings;
 - e. The processing time limits and deemed approval described in § 80 of the *AOSE Regulations* do not apply to these submittals.
8. Applications for non-residential development received with AOSE/PE certified evaluations and/or designs may be reviewed and approved according to the procedures outlined in this policy.

9. The following procedures should be followed when processing applications for individual construction permits submitted with evaluations and/or designs certified by AOSE /PE:
- a. Receive application, log in, accept and process fee;
 - b. Date stamp all materials with the date received;
 - c. Complete Level 1 review within 5 working days. At a minimum all the items contained in the Level 1 Review Checklist should be reviewed and documented. It is recommended that the checklist, AOSE Form L, be used;
 - d. If the application substantially complies with the *Regulations*, the *AOSE Regulations*, and this policy, determine whether a Level 2 Review will be performed. If no Level 2 Review is planned, generate and sign the appropriate permit approval letter (AOSE Form M). The letter is sent to the owner with a copy to the AOSE/PE.
 - e. Conduct Level 2 Review as appropriate and complete the Level 2 Review Report (AOSE Form K).
 - f. If the application substantially complies with the *Regulations*, the *AOSE Regulations*, and this policy based on Level 2 Review, generate and sign the appropriate permit approval letter and send to the owner with a copy to the AOSE/PE (AOSE Form M). Include the Level 2 Review Report as an attachment to the approval letter.
 - g. If, based on Level 1 or Level 2 Review, the submittal does not substantially comply with the *Regulations*, the *AOSE Regulations*, and this policy, the application will be denied or denied administratively if the deficiency can be corrected by the applicant. The action, administrative denial or denial, must be linked to the appropriate AOSE using the Department's data system (VENIS or successor system). Generate and sign the appropriate denial letter (AOSE Form O or AOSE Form S). Denial letters must be sent by certified mail. A copy of the Level 1 review checklist, Level 2 Review Report, or other documentation of review must be included with the denial letter. Contact the Division within 10 days to determine whether enforcement action with the AOSE is appropriate.
 - h. Failure to generate a denial or approval letter within 15 working days of the date the application was received results in an application deemed approved. In this case, generate the appropriate letter and send to the owner with a copy to the AOSE/PE. (AOSE Form Q) A copy of the deemed approved letter must be sent to the Division.

10. The following procedures should be followed when processing applications for individual certification letters:
- a. Receive application, log in, accept and process fee;
 - b. Date stamp all materials with the date received;
 - c. Complete Level 1 review within 10 working days. At a minimum all the items contained in the Level 1 Review Checklist should be reviewed and documented. It is recommended that the checklist, AOSE Form L, be used;
 - d. If the submittal substantially complies with the *Regulations*, the *AOSE Regulations*, and this policy, determine whether a Level 2 Review will be conducted. If no Level 2 Review is planned, generate and sign the appropriate certification letter and send to the owner with a copy to the AOSE/PE (AOSE Form N);
 - e. Conduct Level 2 Review as appropriate and complete the Level 2 Review Report (AOSE Form K);
 - f. If the application substantially complies with the *Regulations*, the *AOSE Regulations*, and this policy based on Level 2 Review, generate and sign the appropriate certification letter and send to the owner with a copy to the AOSE/PE (AOSE Form N). Include the Level 2 Review Report as an attachment to the letter;
 - g. If, based on Level 1 or Level 2 Review, the submittal does not substantially comply with the *Regulations*, the *AOSE Regulations*, and this policy, the application must be denied or denied administratively if the deficiency can be corrected by the applicant. This action must be linked to the appropriate AOSE using the Department's data system (VENIS or successor system). Generate and sign the appropriate denial letter and to the owner with a copy to the AOSE/PE (AOSE Form P or AOSE Form T). Denial letters must be sent by certified mail. A copy of the Level 1 review checklist, the Level 2 Review Report, or other documentation of review must be included with the denial letter. Contact the Division within 10 days to determine if enforcement action with the AOSE is appropriate;
 - h. Failure to approve or deny the application within 20 working days of the date the application was received results in an application deemed approved. In this case, generate the appropriate letter (AOSE Form R). A copy of the deemed approved letter must be sent to the Division.

11. The following procedures should be used when processing applications for multiple lot certification letters:
- a. Receive applications, log in, accept and process fees. Return applications without processing if they do not contain AOSE/PE certified evaluations and abbreviated design information;
 - b. Date stamp all materials with the date received;
 - c. Complete Level 1 review within 45 working days. At a minimum all the items contained in the Level 1 Review Checklist should be reviewed and documented. It is recommended that the checklist, AOSE Form L, be used;
 - d. If the submittal substantially complies with the *Regulations*, the *AOSE Regulations*, and this policy, determine whether a Level 2 Review will be conducted. If no Level 2 Review is planned, generate and sign the appropriate certification letters and send to the owner with a copy to the AOSE/PE (AOSE Form N);
 - e. Conduct Level 2 Review as appropriate and complete the Level 2 Review Report (AOSE Form K);
 - f. If the applications substantially comply with the *Regulations*, the *AOSE Regulations*, and this policy based on Level 2 Review, generate and sign the appropriate certification letters and send to the owner with a copy to the AOSE/PE (AOSE Form N). Include the Level 2 Review Report as an attachment to the letter;
 - g. If, based on Level 1 or Level 2 Review, the submittal does not substantially comply with the *Regulations*, the *AOSE Regulations*, and this policy, the application must be denied or denied administratively if the deficiency can be corrected by the applicant. Generate and sign the appropriate denial letter and to the owner with a copy to the AOSE/PE (AOSE Form P or AOSE Form T). Denial letters must be sent by certified mail. A copy of the Level 1 review checklist, the Level 2 Review Report, or other documentation of review must be included with the denial letter. Contact the Division within 10 days to determine if enforcement action with the AOSE is appropriate;
 - h. Failure to approve or deny the applications within 60 days of the date the applications were received results in the applications being deemed approved. In this case, generate the appropriate letter (AOSE Form R). A copy of the deemed approved letter must be sent to the Division.

12. Where local ordinances require a VDH employee to sign a subdivision plat or otherwise indicate in writing that sites for onsite wastewater systems have been approved (or disapproved), the following procedure shall be used. Local health departments will review proposed subdivisions only at the request of local governments pursuant to local ordinances adopted pursuant to § 15.2-2242 of the *Code*.
- a. All submittals must be date stamped the date they are received. Local and district health departments are to return requests without processing if they do not contain AOSE/PE certified evaluations and abbreviated design information;
 - b. The local or district health department must send an acknowledgment letter to the local government indicating the date received and the projected approval date (45 days from date received);
 - c. Complete Level 1 review within 45 working days. At a minimum all the items contained in the Level 1 Review Checklist should be reviewed and documented. It is recommended that the checklist, AOSE Form L be used;
 - d. If the submittal substantially complies with the *Regulations*, the *AOSE Regulations*, and this policy, determine whether a Level 2 Review will be conducted. If no Level 2 Review is planned, generate and sign the subdivision approval letter and send it to the local government entity with copies to the owner and to the AOSE/PE (AOSE Form U). The local health department designee may or may not be required to sign the actual plat according to local requirements. If a signature on a plat is required, there shall be a statement added to the plat that mirrors the assertions contained in the subdivision approval letter regarding the approval based on AOSE/PE evaluations pursuant to § 32.1-163.5.
 - e. Conduct Level 2 Review as appropriate and complete the Level 2 Review Report (AOSE Form K);
 - f. If the submittal substantially complies with the *Regulations*, the *AOSE Regulations*, and this policy based on Level 2 Review, generate and sign the subdivision approval letter in AOSE Form U and send it to the local government entity with copies to the owner and the AOSE/PE. Include the Level 2 Review Report as an attachment to the letter;
 - g. If, based on Level 1 or Level 2 Review, the submittal does not substantially comply with the *Regulations*, the *AOSE Regulations*, and this policy, the subdivision submittal must be denied. Generate and sign the appropriate denial letter and send it to the local government entity with

copies to the owner and the AOSE/PE (AOSE Form V). The letter must state that the application was denied and it must state the reasons why. A copy of the Level 1 review checklist, the Level 2 Review Report, or other documentation of review must be included with the denial letter. Contact the Division within 10 days to determine if enforcement action with the AOSE is appropriate;

- h. Failure to approve or deny the submittal within 60 days of the date it was received results in the submittal being deemed approved. In this case, generate the appropriate letter (AOSE Form W). A copy of the deemed approved letter must be sent to the Division.

E. Revalidating Expired AOSE/PE Permits; Relying on Previous Certifications

- 1. In general VDH will rely upon the certified evaluation and/or design of an AOSE/PE when considering the renewal or revalidation of an expired permit as long as there is reasonable assurance that there have been no substantive changes to the approved site and system design or location. When VDH has issued a construction permit in reliance upon the work of an AOSE/PE (evaluation or design or both) and that permit has expired of its own terms and the owner has not installed the system pursuant to the permit, the following shall apply:
 - a. Pursuant to *Va. Code* § 32.1-164.1:1 “if a building permit has been obtained or building construction has commenced, the permit may be extended for an additional eighteen months.” In these cases, the applicant must file an application, however there are no fees associated with the application. As long as there are no changes to the system design or the location of the structure or system, the local or district health department is not required to perform a site visit and no new AOSE/PE certification is required. The local or district health department will require the owner to provide one of the following statements:
 - i. A signed and notarized statement affirming that there has been no “substantial, intervening change in the soil or site conditions where the onsite sewage system is to be located;” or
 - ii. A statement signed by an AOSE/PE affirming that there has been no “substantial, intervening change in the soil or site conditions where the onsite sewage system is to be located.”

Unless the local or district health department is aware of specific facts supporting a conclusion that the permit does not substantially comply with the *Regulations* it will extend the permit by adding eighteen

months to the original term of the permit. No additional extensions may be permitted.

- b. If no building permit has been obtained, if building construction has not commenced, or if the extension mentioned in Paragraph a. above has expired the owner will be required to file a new application with the appropriate application fees. Applications are to be processed using the procedures outlined in Paragraph a. above.
 - c. If the applicant makes substantive changes to the application (i.e. changes in location of the structure, number of bedrooms, etc.) or does not provide the statement required in Paragraph a. above, the application is to be handled as a new application.
2. Sections 460.D, 460.E, and 460.F of the *AOSE Regulations* outline the AOSE's responsibilities when utilizing the evaluations or designs of another AOSE or VDH employee. In these circumstances new certifications as to site and soil conditions and system design are required. Examples of such situations include, but are not limited to, new approvals (letter, permit, or subdivision lot), modification of an existing approval, and changes to an existing or expired construction permit design. **As stated in Paragraph 1.a above, no new AOSE/PE certification is required when an applicant seeks to renew an expired permit with no changes in the design or location of the system or in the location of the structure.**
3. Sections 460.D, 460.E, and 460.F of the *AOSE Regulations* do not apply to Professional Engineers in the preparation of designs, drawings, specifications, etc. where the suitability of site and soil conditions has been certified by another AOSE/PE or a VDH employee. The Professional Engineer is governed by the regulations of the Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers & Landscape Architects (18 VAC 10-20 *et seq.*). Regarding the work of others, 18 VAC 10-740.D states, "A professional who has received permission to modify or otherwise utilize the designs, drawings or work of another professional...may seal that work only after a thorough review of the design, drawings or work to the extent that full responsibility shall be assumed for all design, drawings or work."

F. Professional Courtesy Reviews

1. Section 70 of the *AOSE Regulations* provides that VDH will provide certain consultative field reviews with an AOSE/PE. Reviews for individual lots may be site specific, whereas reviews for proposed subdivisions are general in nature. In all cases the courtesy review must be requested prior to the filing of any application with VDH or prior to filing any documents with a local government

for a proposed subdivision. The reason for this requirement is that the courtesy reviews are intended to be discretionary with VDH and not subject to the time limits contained in the *Code* for processing AOSE/PE requests.

2. Section 390 of the *AOSE Regulations* outlines the procedural and other requirements for these reviews. Courtesy reviews are not intended to relieve an AOSE/PE of the responsibility for determining whether a site substantially complies with the minimum requirements of the *Regulations*.
3. The following items are required for any AOSE/PE requesting courtesy review:
 - a. The AOSE/PE requesting a courtesy review must complete AOSE Form X. This form includes a signature block that must be signed by the owner of record giving VDH permission to enter the property for the intended purpose.
 - b. Completed site and soil evaluation report (AOSE Form G). The AOSE/PE is not required to sign the certification statement normally required with an AOSE/PE submittal. In place of the certification statement, the AOSE/PE must provide a brief, written description of the site or soil feature that he has identified as questionable or marginal for the particular site or area where the courtesy review is being requested.
4. Local and district health departments are required to track courtesy reviews according to VDH policy. Requests should be date stamped for the date received. Requests should be logged into VDH data tracking system. All activities (i.e. refusal, date of review, date of report, etc.) should also be recorded.
5. Professional courtesy reviews are not considered case decisions. They cannot be appealed nor are they binding on any party. Local and district health departments must document all courtesy reviews using the report form provided (AOSE Form Y). A copy of the completed report must be mailed to the owner and to the AOSE/PE.
6. If a local or district health department elects not to provide a requested courtesy review, it must inform the AOSE/PE in writing (with a copy to the owner). This notice should be sent within 15 days of the date the request was submitted.

Part IV

Dealing with Problems, Enforcement, Etc.

A. General Discussion.

1. *The policy of the Department is to take appropriate enforcement actions to assure public health and environmental protection.*

2. Enforcement actions should reflect the seriousness of the alleged offense. VDH is not in a position to accept poor or inadequate site evaluations and designs. VDH's mission to protect public health and the environment does not allow it to accept shoddy work. On balance, in the course of correcting or removing any AOSE found to be submitting inadequate work, VDH cannot go to the opposite extreme and nit-pick every detail or possible error. Finding the balance is our challenge.

B. General Guidelines and Information

1. Local and district EH staff and directors are primarily responsible for problem solving as it relates to situations encountered in the field regarding site approvals, system design, and construction. They are encouraged to utilize the procedures outlined in this policy. Every situation tends to be different, and writing procedures to anticipate all the potential scenarios is impossible. District and local health departments are encouraged to seek the advice of the Division if they are unsure of a particular procedure. The Division will be responsible for monitoring the performance of AOSEs.
2. VDH *will not* accept responsibility or liability for negligent acts by private evaluators or designers, nor does it intend to sacrifice public health and environmental protection in order to reduce potential impacts (financial or otherwise) upon owners resulting from negligent private evaluations and designs. VDH *will be* a partner in trying to identify solutions to problems. However, the Department expects the private sector to take the lead in problem solving when situations arise in which the primary responsibility for approval lies with an AOSE/PE. Where private litigation is appropriate for resolving equity issues, VDH will recommend that owners seek legal counsel to protect their rights and investments.

D. Previous Denials.

1. Section 320 of the *AOSE Regulations* sets out certain requirements regarding sites that have been rejected or denied by VDH. That section states that an AOSE/PE may not certify any site as meeting the *Regulations* that has been denied unless the Board's regulations have changed in such a way that the site has been rendered suitable by the change in regulations. An AOSE/PE is not prohibited from certifying a site on a property that is different from the site that was denied, nor is he prevented from assisting an owner or another AOSE/PE by offering expert opinions regarding site and soil conditions on a rejected site.
2. The primary reason for the prohibition on certifying previously rejected sites is to preserve the integrity of the appeal process. The provisions of the *Code* that require VDH to accept private evaluations and designs, together with the provisions for deemed approval, create the potential to short-circuit the appeal

process if an AOSE/PE were able to certify previously denied sites. Such a short-circuiting of the appeal process could abrogate the Board of Health's responsibility to protect public health and the environment and render the Sewage Handling and Disposal Appeal Review Board moot. When VDH has denied an application, the owner has the right to appeal that decision via procedures that are defined in the Administrative Process Act (Va. Code § 2.2-4000 et seq.) and the *Regulations*.

3. When VDH has rendered a case decision regarding the suitability of a site for an onsite sewage system under the *Regulations* and the owner has chosen not to exercise his right to appeal that decision, VDH has sole discretion to decide whether to re-evaluate its findings. This policy establishes criteria for reviewing a case decision when an AOSE/PE renders an opinion in writing that a previously denied site complies with the *Regulations* and/or VDH policies for an onsite sewage system. In no case will the AOSE/PE opinion in such case be considered binding upon VDH nor will the time limits associated with AOSE/PE submittals or deemed approval apply. If an owner wishes to file a new application in such a case, he must comply with one of the following:
 - a. If more than two years have elapsed since the date of VDH's written decision the owner must provide at least one written report from an AOSE/PE stating that the site substantially complies with the *Regulations*. The report must include an evaluation report that complies with the *AOSE Regulations* and this policy (except that no certification statement is required) and the AOSE/PE's explanation and opinion.
 - b. If two years or less have elapsed since the date of VDH's written decision, the owner must provide written reports as described in Paragraph a. above from two or more AOSE/PEs.

VDH will handle the application as it would a bare application and render a new decision. The owner may challenge an adverse decision according to the appeal process provided in the *Regulations*.

F. Appeals of Denials.

1. No owner may appeal the denial or rejection of any construction permit, letter, or subdivision approval, when the denial is based on an incomplete application until such time as the application is made complete. Challenges to permit denials shall follow the processes provided in the *Regulations*. **If necessary, the Division will resolve any disputes that may arise between an owner and a local or district health department regarding incomplete applications.**

G. VDH Actions to Revoke or Modify Approvals

1. The *AOSE Regulations* (§ 70.B.5) provide that VDH may initiate procedures to revoke or modify its approvals whenever it believes that a site approved in reliance upon the certification of an AOSE/PE does not substantially comply with the minimum requirements of the *Regulations*.³ Because they are a type of litigation, administrative proceedings to revoke approvals are, by their nature, adversarial and tend to generate negative feelings among AOSE/PEs, owners, and VDH staff. Although these adversarial proceedings are sometimes necessary, all parties stand to benefit if these situations can be resolved in ways that are mutually agreeable to all parties. For this reason, the *AOSE Regulations* and this policy emphasize that modifying an approval with the owner's consent is a desirable option in a revocation situation.
2. When VDH modifies an approval in a manner that is agreeable to the owner, the net result is still the revocation of the original approval. The difference, however, is that the adversarial process is avoided and the revocation can occur relatively seamlessly with the issuance of a new permit. VDH believes that, with relatively few exceptions, all potential revocation situations can be resolved with the issuance of some type of modified approval. The commissioner has granted at least one variance to date to resolve an AOSE permit revocation situation and anticipates that others may be granted in the future. Obviously, the cooperation of the owner and the AOSE/PE are invaluable in the process. If an owner would rather challenge VDH's findings regarding the site and soil conditions, it is unlikely that a problem will be resolved by consent, and it is more appropriate to proceed with the (adversarial) revocation process. If the district or local health department is working to try to resolve a problem situation with the owner's cooperation, a key concern is that the process not be allowed to drag on indefinitely.
3. When the local or district health department becomes aware that a site or sites may not comply with the *Regulations*, the following procedures may be followed. The district health director has the discretion to decide whether it is best to proceed with the adversarial process (hearing) or whether VDH should attempt to resolve the situation with the owner's consent. These procedures apply to cases where facts are discovered that would have precluded the issuance of VDH's approval had they been known at time that approval was granted.⁴
 - a. Modifying an approval with the owner's consent (non-adversarial).

³ VDH is responsible for taking administrative action to revoke or modify *any* approval if it finds at a later date that the approval does not substantially comply with the *Regulations*. VDH bears this responsibility for those approvals issued in reliance upon an AOSE/PE certification or upon evaluations and designs performed by its own employees.

⁴ These procedures are not applicable to situations where a construction permit or other approval is rendered null and void because conditions have changed from those shown on the permit. All that is required in these situations is proper written notice to the owner that the permit or letter is null and void because of the changed conditions.

- i. The environmental health manager should contact the owner (telephone, fax, letter) and explain the situation in plain language. He should tell the owner how VDH became aware of the situation and give a brief but concise summary of the facts as they are understood at the time. This communication must convey the message that VDH is concerned that the site may not substantially comply with the *Regulations*; and if those concerns are confirmed, VDH may need to take some action to rescind or modify the approval that was granted. If the situation involves a construction permit, VDH must ask the owner not to construct the system until the situation is resolved. The environmental health manager should ask to set up a meeting at the site with the owner and the AOSE/PE who did the work to review the facts and begin a dialogue to resolve the situation. Additional evaluations, testing, etc. may be necessary to augment or confirm the facts before the discussion can turn to options such as modifying the system design or assisting the owner in requesting a variance. Always follow up verbal contacts with a letter to the owner (copy to the AOSE/PE who certified the site). If the owner is not amenable to this kind of informal discussion/meeting, the district director should consider implementing the administrative proceedings for revocation.
- ii. Appropriate representatives from the local or district health department (may include VPI contract soil scientists) should meet with the owner and his agents (AOSE/PE, contractor, etc.) as necessary to review facts, gather additional information, etc. If the parties can come to some resolution, the specific steps to that resolution (and expected timeframes for accomplishing them) should be clearly spelled out in a letter from the environmental health manager to the owner (copy to the AOSE/PE). Potential options include: identifying a new site that substantially complies with the *Regulations*, adding secondary treatment to a system that was certified as a septic effluent system, changing the design from an in-ground system to a shallow-placed system, or assisting the owner in applying for a variance if no solution is found that substantially complies with the *Regulations*. The philosophy here is that VDH is not ‘fixing’ the problem for the AOSE/PE, but it is participating in the solution by providing information, facilitating communications, offering advice on regulatory requirements, and facilitating variance requests, etc. In many cases engineering plans may be needed to complete the process. When a satisfactory resolution has been worked out, the owner will need to agree in writing that VDH had substantial evidence to support its decision to revoke the approval and that he does not contest that case decision. If the statement contained in AOSE Form Z is not appropriate for the specific situation, the environmental health

manager should consult with the Division and/or the Assistant Attorney General to develop an appropriate consent statement.

- iii. Resolving a potential revocation situation informally, with the owner's consent, necessarily relies on cooperation among the owner, the AOSE/PE, and VDH. An appropriate time frame for resolving a potential revocation situation by consent should be no more than about six months. If communications have broken down, the situation has become emotional or confrontational, or things are dragging on because the owner or another party is unresponsive, the district director will need to seriously consider whether it is necessary to move to the next level, the administrative proceeding to revoke the approval.

b. Revocation proceedings (adversarial).

- i. **Factual assessment.** Before giving notice of any intent to take administrative action to revoke an approval, the district health director, with assistance from the environmental health manager and staff, must assess the factual information at hand. If the district director determines that there is adequate factual evidence to support a preliminary finding that a site may not substantially comply with the *Regulations*, he should proceed with notice to the owner of an informal fact-finding conference and the intent to revoke VDH's approval. If the director determines that the facts support a conclusion that the site and/or design substantially comply with the *Regulations*,⁵ he may decide not to initiate any administrative action. The director may request permission from the owner to conduct additional evaluations to gather additional factual information.
- ii. **Notice to owner.** If the district health director has determined that there is substantial evidence to support the decision to go forward with the revocation process or if the owner is uncooperative in allowing additional evaluations, the owner (and local government when appropriate) must be notified in writing. The notice should be sent by certified mail or hand-delivered within 10 working days, if possible, of discovery of the factual basis for the decision to revoke. The notice must state briefly the factual basis for believing

⁵ Administrative (case) decisions rely on a level of certainty and a degree of evidence called "substantial evidence." Substantial evidence is "evidence greater than a scintilla of evidence that a reasonable person would find sufficient to support a conclusion." (Merriam-Webster's Dictionary of Law, 1996) This standard does not require that every fact support a conclusion of substantial compliance. Indeed, many times decision-makers are faced with ambiguous, inconsistent, even contradictory facts. VDH has the discretion to find that a site and/or design substantially complies with the *Regulations*, even though there may be contradictory facts in the record. District directors should consult with the Division, the Assistant Attorney General, or both, for advice regarding case decisions.

that it may be necessary to revoke the approval (with appropriate citations to the *Regulations*) as well as the time, place, date, and purpose of the informal conference (with appropriate citation to the *Regulations* and the *AOSE Regulations*). In the case of a construction permit, the notice must also ask the owner not to install the system until the issue has been resolved. If the case involves VDH's approval of a subdivision, the notice must be addressed to the owner of record and a copy must also be sent by certified mail (or hand delivered) to the appropriate local government official responsible for subdivisions. The environmental health manager is responsible for ensuring that proper notice is delivered. A copy of the notice should be sent to the AOSE/PE who certified the site or sites. See AOSE Form AA for suggested Notice of Informal Hearing and Intent to Revoke.

- iii. **Informal fact-finding conference.** The district health director convenes the informal fact-finding conference. The district or local health department may hire a court reporter to make a verbatim record of the proceedings, however, this is not required. In most cases, the local or district health department staff should present their factual evidence and arguments first. The owner should then have the opportunity to present his factual evidence and rebuttals. The owner has the right to be represented by an attorney or other qualified person, however, neither party has the right to cross-examine any witnesses in an informal fact-finding conference. The district director may ask questions and facilitate discussion and is responsible for maintaining order. With the consent of the owner, the director may continue the informal fact-finding conference to a later date to allow for the production of additional evidence, additional testing or evaluation, or site visits.
- iv. **Case Decision.** At the conclusion of the informal fact-finding conference the district director is responsible for issuing a case decision. In accordance with § 200 of the *Regulations* that decision must be sent to the owner by certified mail within 15 days of the close of the informal fact-finding process.⁶ The written decision must describe the factual as well as the regulatory basis for the decision. The decision must inform the owner that he may appeal the decision in accordance with the *Regulations* and § 70.B.5 of the *AOSE Regulations* to the Sewage Handling and Disposal Appeal Review Board and that his request for a hearing must be received by the Board within 30 days of the owner's receipt of the case decision. No suggested form for this decision is

⁶ Even though the decision arises in the context of the *AOSE Regulations*, the authority for issuing and revoking permits derives from the *Regulations*. Therefore, the decision must be made in accordance with the *Regulations*.

provided in this policy. Directors unfamiliar with writing case decisions should seek guidance from the Division, the Assistant Attorney General, or both.

- c. **Copy of file sent to the Division.** Within 10 days of issuing its decision to revoke or modify an approval that was issued in reliance upon an AOSE/PE certification the district or local health department must notify the Division by sending a complete copy of the case decision, and include the name and certification # of the responsible AOSE/PE.
- d. **Election of remedies, new application, fees waived, plan to remedy if original permit by AOSE/PE, time limits not applicable if variance is requested.** The owner may elect to challenge a decision to revoke an approval by requesting a hearing before the Appeal Review Board or the owner may elect to file an application for a variance or a new application. It is VDH's policy not to allow the owner to pursue an appeal and file an application for a variance or a new application simultaneously. VDH will waive the application fees for an owner who elects to file a new application within 30 days. The new application must be submitted with an AOSE/PE plan (evaluation and design) for remedying the problems that resulted in the revocation of VDH's approval. The new application is to be handled using the same procedures outlined for all applications submitted with AOSE/PE certifications. If a variance is to be requested because there is no site that complies with the *Regulations*, a request for variance must be included with the application and the time limits for processing the application specified in § 32.1-163.5 shall not apply and, in the alternative, the time limits for processing a variance request (12 VAC 5-610-190) shall apply.

Part V

Final Inspections

- A. Section 70.D of the *AOSE Regulations* requires an AOSE/PE to perform a final inspection for any system installed pursuant to a construction permit where the permit was based on a design certified by the AOSE/PE. VDH may, but is not required to, inspect such systems. Both of these provisions apply to all construction permits issued pursuant to applications filed on or after July 1, 2002. VDH is responsible for the final inspection on any construction permit issued pursuant to an application filed before July 1, 2002, and an AOSE is responsible only for filing a completion statement as per § 60.D of the *Emergency AOSE Regulations* and GMP 100 for such installations. In order to ensure that these requirements are met installers should notify the appropriate local health department whenever they are ready for a final inspection, regardless of whether that inspection is the responsibility of an AOSE/PE or VDH.
- B. AOSE Form BB contains the inspection report and completion statement required of an AOSE/PE under §70.D of the *AOSE Regulations*.

- C. Under the *AOSE Regulations* the AOSE/PE is the primary inspection agent for those systems designed by the AOSE/PE, each AOSE/PE should attempt to secure the contractor's completion statement that is required under the *Regulations*. In accordance with the *Regulations*, the owner remains the responsible party with respect to the contractor's completion statement. However, the AOSE/PE can facilitate the eventual issuance of an operation permit by securing the contractor's completion statement and forwarding that statement to the appropriate local or district health department. The contractor's completion statement (AOSE Form CC) may be used for AOSE/PE construction permits. AOSE/PEs are encouraged to print this form and furnish it for the contractor to sign at the time of the final inspection.
- D. Local and district health departments are not required to perform final inspections of AOSE/PE-designed systems but may perform such inspections at their sole discretion and as resources allow. Local and district health departments are discouraged from conducting final inspections as a routine method for accomplishing Level 2 reviews.
- E. Whenever an AOSE/PE is responsible for the final inspection of an onsite system (see Par. A above), that responsibility shall extend to any subsequent re-issuance of the permit (i.e. renewal, change of owner, etc.). VDH is responsible for informing the AOSE/PE of the re-issuance of a permit by sending a copy of the permit approval letter to the AOSE/PE who originally designed the system. Whenever an AOSE/PE conducts an inspection of a system and finds that it he cannot approve it, he shall immediately notify the owner in writing and send a copy of the notice to the appropriate local health department. The written notice must include an explanation of the reasons for the AOSE/PE's finding.
Whenever an AOSE/PE requires corrective actions prior to finding that a system is properly installed, he must document those corrective actions in the inspection report and completion statement.
- F. **As-built drawings, when required pursuant to 70.D are subject to the same site location requirements as construction drawings (See 360 and Part II.B.3 of this policy).**
- G. VDH will be the primary agent for inspecting the location and construction of all private wells. In accordance with § 70.E of the *AOSE Regulations* an AOSE/PE is required to inspect and file a completion statement (AOSE Form EE) for any well-only permit issued in reliance upon a certification by that AOSE/PE.

Part VI
Contracting With AOSE in a Backlog Situation, VDH Employees

- A. When backlogs exceed the maximum allowed by law, district and local health departments are to follow the guidance provided in GMP #71 or successor policy.⁷
- B. No district or local health department may contract with an AOSE/PE who is currently employed by VDH.
- C. No VDH employee may act as a private sector AOSE/PE while employed by VDH.

⁷ Va. Code § 32.1-163.4.A states, “In any case where the local or district health department experiences a septic system or other onsite sewage system permit backlog of fifteen working days from the application filing date, the Commissioner shall contract with authorized onsite soil evaluators for the field evaluation of the backlogged application sites. The Department shall review these evaluations and may approve the permit applications upon finding that the evaluations are in compliance with the Board's regulations implementing this chapter. The Department shall not be required to do a field check of the evaluation prior to issuing the permit; however, the Department may conduct such field analyses as deemed necessary to protect the integrity of the Commonwealth's environment.

Index of Forms- These forms are available upon request from the Division or they may be obtained by visiting the VDH website: www.vdh.state.va.us Forms are subject to change without notice, therefore all AOSE/PEs are encouraged to periodically review the VDH website to ensure they are using the most current forms.

AOSE Form A-	Application for AOSE certification
AOSE Form B-	Form for professional references
AOSE Form C-	Application for AOSE certification renewal
AOSE Form D-	Application for Construction Permit or certification letter
AOSE Form E-	Abbreviated design (for certification letters and subdivisions)
AOSE Form F-	Request for subdivision review by local government
AOSE Form G-	Site and Soil Evaluation Report (with certification statement)
AOSE Form H-	Construction Drawings
AOSE Form I-	Design Calculations
AOSE Form J-	System Specifications
AOSE Form K-	Form for documenting Level 2 Review
AOSE Form L-	Level 1 Review Checklist
AOSE Form M-	Approval letter for issuing AOSE/PE permit
AOSE Form N-	Approval letter/AOSE/PE certification letter
AOSE Form O-	Denial letter- permit
AOSE Form P-	Denial letter- certification letter
AOSE Form Q-	Deemed approved letter- permit
AOSE Form R-	Deemed approved letter- certification letter
AOSE Form S-	Administrative denial letter- permit
AOSE Form T-	Administrative denial letter- certification letter
AOSE Form U-	Subdivision approval letter
AOSE Form V-	Denial letter (subdivision)
AOSE Form W-	Deemed approved letter- subdivision
AOSE Form X-	Form for requesting professional Courtesy Review
AOSE Form Y-	Form for documenting professional Courtesy Review (VDH)
AOSE Form Z-	Owner statement- consent to modification of AOSE/PE approval.
AOSE Form AA-	Notice of Informal Hearing/Intent to Revoke VDH approval
AOSE Form BB-	AOSE/PE inspection form and Completion Statement
AOSE Form CC-	Contractor's Completion statement
AOSE Form DD-	AOSE/PE request for information from VDH files
AOSE Form EE-	AOSE/PE Completion Statement for well-only permit